Purpose: The United States Air Force (USAF) KC135 and KC10 Aircrew Training Systems (ATS) is planning to update the current twenty-six (26) Evans & Sutherland (E&S) ESIG-4530 Image Generator (IG) compatible databases during the Fiscal Year (FY) 2006-2007 periods.

Background: The databases were created by a team of BOEING and E&S from 2002 to 2005 using the E&S EaSIEST toolset and other tools as required. All raw data, processed raw data, integrated data sets, and other EaSIEST data sets are available. All KC10 and KC135 ATS IGs are ESIG-4530s, capable of running 4,500 polygons at 60Hz with the realfog option. The databases are designed with both geo-typical and geo-specific imagery. The IGs on both the KC10 and KC135 ATS programs interface with Thales WIDE type systems using older PHEBUS projectors. The Field of View (FOV) of the display system is five (5) channels of 45x45 degrees each for a total FOV of 225x45 (vertical) degrees. The databases are organized into five (5) groups: Lot 1 and Lot 2 (sets 1 to 4). Lot 1 and Lot 2 both have Database Design Documents (DBDDs) that provide design and utilization information on the databases. 23 of the databases represent areas within the CONUS and OCONUS areas of about 70 by 70 square miles. Three (3) of the databases are large gaming areas within CONUS.

Task Statement: The current plan is for a selected contractor to provide updating of the databases over the FY06 and FY07 periods. The intention is to provide a fixed amount of funding for each year on the order of $300,000 (TBD). For each year, all desired updates will be prioritized by USAF subject matter experts. The contractor will provide updates to the databases based on the prioritization within the funding constraint for that year.

Qualifications: Interested contractors must have the capabilities and experience of working with E&S ESIG-4530 databases, image generators, EaSIEST, and geo-specific and geo-typical imagery. Interested contractors must have the computational resources to produce the updated databases in a reasonable amount of time (i.e., within about 3-4 months after definition of the required changes). Interested contractors must be capable of updating the Microsoft WORD DBDDs, have in place a reasonable quality assurance and configuration management process, and must be capable of supporting a reasonable test methodology. In addition, interested contractors will be required to work with the existing KC135ATS and KC10ATS contractors (FlightSafety Services Corporation, FSSC, and BOEING respectively) on some or all of the database updates.